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May 16, 2005

File No. 29142.070271

By Email

Ms. Diane Smith
Environmental Protection Specialist
Water Quality Protection Division
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733
Smith.Diane@epa.gov

Comments on Revised Draft Mercury TMDL Report

Dear Ms. Smith:

The Utility Water Act Group (UWAG¹) appreciates this opportunity to comment on the revised *Draft TMDL Report for Mercury in Fish Tissue for Coastal Bays and Gulf Waters of Louisiana*, dated April 2005. The revised report replaces an initial draft proposed by EPA on December 2, 2004.

By letter dated January 10, 2005, UWAG provided comments on the initial draft TMDL. Those comments reflected UWAG's concerns about:

- EPA's reliance on migratory fish tissue data collected outside of the § 303(d) listed segments;
- EPA's use of an aggregate wasteload allocation without distinction among point sources; and
- EPA's recommended implementation options, which did not provide sufficient flexibility to ensure success.

¹ UWAG is a voluntary, ad hoc, non-profit, unincorporated group of 198 electric utility systems, which own and operate over fifty percent of the nation's total generating capacity. The Edison Electric Institute, the American Public Power Association, the National Rural Electric Cooperative Association, and the Nuclear Energy Institute also are UWAG members.



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UWAG believes that EPA's revised report triggers the same concerns as the initial draft. As a result, UWAG respectfully resubmits the January 10 comments as an attachment to this letter.

Although the revised report contains a more complicated expression of the wasteload allocation (*i.e.*, individual loads for POTWs, gross "unassigned" loads for larger industrial point sources, and an apparent exemption for smaller industrial point sources), the report is inconsistent about the impact of the wasteload allocation on point sources (compare ES-4, ES-5, 7-4 and 8-3). These inconsistencies leave open the possibility that dischargers without sources of mercury in their operations nonetheless will be subject to new, more onerous permit requirements under 40 CFR § 122.44(d)(1)(vii)(B). Such a result would be untenable, especially in the context of a ubiquitous background pollutant like mercury.

If you have any questions about our comments, please contact UWAG's counsel, Brooks M. Smith, Esquire, Hunton & Williams, 951 E. Byrd Street, Richmond, Virginia 23219 (bsmith@hunton.com; 804/ 787-8086).

Respectfully submitted,

- s -

Keith Hanson, Chairman
UWAG Water Quality Committee

Attachment

cc: Kristy Bulleit, Esq.
Brooks Smith, Esq.

Attachment



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January 10, 2005

File No. 29142.070271

By Email

Ms. Linda Adams
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1445 Ross Avenue
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Comments on Draft Mercury TMDLs

Dear Ms. Adams:

The Utility Water Act Group ("UWAG") appreciates this opportunity to comment on the draft mercury TMDLs for waters listed in the Atchafalaya River, Barataria, Calcasieu River, Lake Pontchartrain, Mermentau River, Vermilion-Teche River, Mississippi River, Sabine River, and Terrebonne Basins of Louisiana (collectively, the "Draft TMDL"). EPA published notice of the Draft TMDL in the Federal Register on December 9, 2004 (69 Fed. Reg. 71409), and imposed a comment deadline of January 10, 2005.

UWAG is an association of 164 individual electric utilities and four national trade associations of electric utilities, the Edison Electric Institute, the National Rural Electric Cooperative Association, the American Public Power Association, and the Nuclear Energy Institute. The individual utility companies operate power plants and other facilities that generate, transmit, and distribute electricity to residential, commercial, industrial, and institutional customers. The Edison Electric Institute is the association of U.S. shareholder-owned electric companies, international affiliates, and industry associates. The National Rural Electric Cooperative Association is the association of nonprofit electric cooperatives supplying central station service through generation, transmission, and distribution of electricity to rural areas of the United States. The American Public Power Association is the national trade association that represents publicly owned (municipal and state) electric utilities in the United States. The Nuclear Energy Institute establishes industry policy on legislative, regulatory, operational, and technical issues affecting the nuclear energy industry on behalf of its member companies, which include the companies that own and operate commercial nuclear power plants in the United



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States, as well as nuclear plant designers and other organizations involved in the nuclear energy industry. UWAG's purpose is to participate on behalf of its members in EPA's rulemakings under the CWA and in litigation arising from those rulemakings.

Several of UWAG's member companies own and operate facilities that are listed as affected NPDES dischargers in Appendix C of the Draft TMDL. Other UWAG members, while not directly impacted by the Draft TMDL, have a strong interest in this proceeding because of the issues of general interest raised by EPA that may recur in other TMDL proceedings around the country.

At the outset, UWAG recognizes that the regulation of mercury in the environment is a complex challenge. Mercury is present naturally in the environment. Its movement through the environment is governed by natural biogeochemical processes, as well as anthropogenic activity. Mercury appears in different chemical states, some of which are of greater concern than others due to their mobility, fate, transport, perceived toxicity and other factors. To further complicate matters, these chemical states transform from one to another depending on different prevailing conditions in the environment.

While EPA and many other interested groups have studied mercury's behavior in the environment and made considerable progress toward a greater understanding of mercury cycling, many uncertainties remain to be addressed, including: (1) the relationship between the chemical state of mercury at issue, the conditions under which it occurs, and the resulting impacts on water quality / biota; (2) the relationship between load reductions and discernible water quality / biota improvements; (3) the appropriate sources from which load reductions should be sought; (4) the regulatory options for effectively reducing mercury loading; (5) the economic implications of regulating mercury discharges; (6) the benefits of local and regional mercury reduction efforts; and (7) the benefits of reductions from point source dischargers.

Given these complexities and uncertainties, not to mention the jurisdictional limitation EPA and states face in their attempt to deal with a multi-media issue like mercury within the confines of a statute focusing exclusively on water, the TMDL process seems ill-suited for effectively managing mercury in the nation's waterbodies. To the extent that EPA and states continue to believe that the TMDL process is appropriate, however, they need to proceed in a flexible and iterative manner that ensures: (a) adequate and appropriate information will be developed and analyzed *before* significant regulatory decisions are made; and (b) only those point sources that increase mercury loading from their operations are targeted for regulation.

UWAG appreciates EPA's candor about uncertainties in the science underlying the Draft TMDL, and the need for innovative implementation options to account for those uncertainties.



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However, UWAG has concerns about one aspect of the Draft TMDL, and seeks to clarify another.

1. Reliance on Migratory Fish Tissue Data Collected Outside of the Affected Segments

UWAG has concerns about the fish tissue data used by EPA to develop the TMDL. Not only are those data from migratory fish (king mackerel), they also were collected, with limited exception, from sites outside of the affected segments. UWAG fails to see how such data can legitimately be used to predict the assimilative capacity of the affected segments or justify loading reductions from affected sources, since the fish could have ingested mercury (and, in any event, were sampled) in a completely different water many miles, states and even countries away. UWAG believes that EPA's reliance on such data in this proceeding raises significant legal, technical and policy concerns. To address those concerns, EPA should postpone further action on the TMDL until adequate, local non-migratory fish tissue data are available.

2. Requirements for Point Sources

The Draft TMDL contains aggregate wasteload allocations expressed as annual mass caps for each coastal segment. Although EPA assumes that each point source will discharge mercury at concentrations of 12 ng/L or less, this assumption is not embodied in EPA's aggregate wasteload allocations. In other words, EPA did not calculate an individual loading for each point source based on assumed discharge concentrations and then aggregate those loadings. To the contrary, EPA listed a substantial majority of point sources as having zero loading of mercury (*see* Appendix C of the Draft TMDL).

To avoid confusion during the implementation process, EPA should clarify that the TMDL only expresses aggregate wasteload allocations. Individual wasteload allocations and, in turn, individual permit requirements, cannot be determined unless and until the state demonstrates, as part of TMDL implementation, that the average net mercury level in a point source's discharge in fact exceeds 12 ng/L.

UWAG believes that EPA properly left to the state the authority to choose among various TMDL implementation options. Those options should include:

- (a) certification that there are no operations that could reasonably be expected to increase mercury loading in the receiving water (thus obviating the need for monitoring requirements or other permit conditions for point sources that do not contribute to the mercury load or that do so only as a pass-through pollutant or in storm water runoff);



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- (b) in the absence of such a certification, monitoring to demonstrate that the average net mercury level in a source's discharge does not exceed 12 ng/L; and
- (c) if the average net mercury level in fact exceeds 12 ng/L, then a mercury minimization plan may be an appropriate condition, and certainly would be necessary before the state considered numeric limits.

Given the scope and impact of the Draft TMDL, flexibility is the key to successful completion and implementation. We urge EPA to proceed in an iterative, step-wise manner, and to address our concerns and requests for clarification before finalizing the TMDL.

If you have any questions about these comments, please contact UWAG's counsel, Brooks M. Smith, Esquire, Hunton & Williams, 951 E. Byrd Street, Richmond, Virginia 23219 (bsmith@hunton.com; 804/ 787-8086).

Respectfully submitted,

- s -

Keith Hanson, Chairman
UWAG Water Quality Committee

cc: Kristy Bulleit, Esq.
Brooks Smith, Esq.
Jaime Allison, Esq.



LAFAYETTE UTILITIES SYSTEM

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May 15, 2005

Via Email (Smith.Diane@epa.gov) and Federal Express

Ms. Diane Smith
Environmental Protection Specialist
Water Quality Protection Division
U.S. Environmental Protection Agency, Region 6
1445 Ross Ave.
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Re: Comments by the Lafayette Consolidated Government and the Lafayette Utilities Systems on EPA Draft TMDL Report "TMDLS for Mercury in Fish Tissue for Coastal Bays and Gulf Waters of Louisiana, Subsegments 010901, 021102, 042209, 070601, 110701, 120806," dated April 2005

Dear Ms. Smith:

The Lafayette Consolidated Government and the Lafayette Utilities System (LCG/LUS) submit these comments on the above-referenced EPA Draft TMDL Report ("Draft Report"), the release of which was announced in 70 Fed. Reg. 19760 (April 14, 2005). LCG/LUS own and operate four (4) major municipal wastewater treatment plants (LA0036374, LA0036382, LA0036391, LA0042561) and a major electric generating plant (LA0005711). All of these facilities discharge (directly or indirectly) into the Vermilion River in Lafayette Parish, Louisiana. LCG/LUS recognize that the Vermilion River Basin and these facilities are not the subject of the Draft Report, but rather are subject to the mercury (Hg) TMDLs for point sources discharging into the Vermilion-Teche River Basin, established by the U.S. Environmental Protection Agency (EPA) on January 19, 2001. LCG/LUS are commenting on the Draft TMDL Report because they believe that the final TMDL Report may affect how the Louisiana Department of Environmental Quality (LDEQ) implements the mercury TMDLs established in 2001. We also request correction of certain statements and other information in the Draft TMDL Report that were carried over from the December 2004 draft TMDL report and are no longer relevant.

Implementation of Mercury TMDLs and Wasteload Allocations (WLA's)

There appears to be substantial internal contradiction within the Draft Report with regard to the discretion available to the State of Louisiana in its implementation of TMDLs and WLAs. As discussed below, EPA should make clear consistently throughout the Draft Report that the State has considerable discretion in

determining how to implement the Hg TMDL and WLA program, including the development of the data necessary to support sound implementation decisions.

Some parts of the Draft Report include language which proposes implementation of TMDLs and WLAs by means which are both premature and more stringent than necessary to meet the applicable narrative standard or any other applicable standards. In addition, these proposed implementation methods are presented in a way which suggests that the State of Louisiana has less discretion than it in fact has under applicable federal law as to how it may implement the mercury TMDLs and WLAs. Other parts of the Draft Report appear to indicate that the State has considerable flexibility and discretion in determining which Hg discharge levels may require Hg minimization or other control measures and how, whether, and when WLAs should be satisfied. These parts of the Draft Report strongly suggest that such State discretion is particularly warranted given the lack of technical data needed to determine scientifically sound TMDLs and WLAs.

For the reasons discussed below, the Draft Report should make clear that Hg minimization or other control requirements are not triggered for a particular source when any clean monitoring simply detects Hg in effluent and are not automatically triggered even when such monitoring detects Hg at levels above the level assumed in determining the WLA. Moreover, the Draft Report should clarify and emphasize that the State of Louisiana has considerable discretion in determining when and how the assigned WLAs are to be implemented, particularly given the significant lack of monitoring data and incomplete site specific information about many point sources of Hg.

1. EPA Should Make Clear that the State Is Not Required Under the TMDL Requirements to Prescribe Mercury Minimization Measures or Effluent Limits Whenever Mercury Is Detected in Effluent from Larger Sanitary Waste Water Treatment Plants and Other Point Sources.

The Draft Report states that if Sanitary Waste Water Treatment Plants (WWTPs) with discharges greater than 100,000 gpd detect mercury in their effluent after using clean techniques, those facilities “will be required to develop a mercury minimization plan for their facility and all sources discharging” into the treatment plant. The Draft Report specifies similar requirements for non-sanitary point sources that discharge more than 100,000 gpd. (Draft Report, p. 7-4). Read literally, this language appears to require that if *any* Hg is detected in the effluent from any of these plants, using the highly sensitive method 1631, then the plant must undertake Hg minimization measures. Federal law does not mandate such a requirement, and EPA should not impose it on the State. EPA has no authority to impose such minimization measures under the TMDL provisions until it has been established, at very least, that effluent from a particular Sanitary WWTP or other point source would result in an exceedance of the WLA (and in this particular case, EPA acknowledges the “uncertainty in the TMDL [and by default the WLA] analysis” (*Id.*, p. 8-3) which would result in implementation of costly minimization measures not supported by relevant site specific data). 40 C.F.R. 122.44(d)(1)(vii)(B) authorizes the permitting authority to establish effluent limits to protect a narrative water quality criterion that are consistent with the assumptions and requirements of any available WLA for a particular discharge. It does not authorize EPA to require a State permitting authority to establish a more stringent limit. Moreover, as discussed below, the Draft Report contradicts itself in a different section by apparently reaching just the opposite conclusion and also suggesting that Hg minimization may not even be necessary where effluent levels exceed 12 ng/L, the level upon which the WLAs in the Draft Report are based. Accordingly, EPA should make clear in the final TMDL Report that the State of Louisiana is not required under Federal law to establish any type of limit or control measure designed to reduce a Sanitary WWTP’s or other point source facility’s mercury levels in the effluent simply because Hg has been detected in the facility’s effluent.

2. EPA Should Make Clear that the Draft Report When Issued in Final will Not Automatically Require the State to Require Point Sources, Including Sanitary WWTPs, to Undertake Hg Minimization or Other Hg Controls to Meet Their Assigned WLAs, Even If Initial Monitoring Using Clean Techniques Suggests a Source's Hg Discharge May Exceed the WLA.

While, as noted above, the Draft Report appears to indicate in one place an intention that Hg minimization measures be adopted for Sanitary WWTPs and other point sources with discharges greater than 100,000 gpd if any Hg is detected in effluent, the Draft Report at p. 8-3 indicates that the State has considerable discretion in determining when and how such minimization measures or other controls should be implemented. The Draft Report states that “[I]f a facility is found to discharge mercury at levels above 12 ng/L, a mercury minimization plan *may* be required.” (emphasis added). Underscoring the “uncertainty in the TMDL analysis,” it further explains that the State of Louisiana may consider site-specific characteristics in determining whether and the extent to which sources should be required to implement Hg minimization programs and that the State has considerable discretion in determining when and whether to prescribe additional limits in the permits of potential Hg sources (p. 8-3). As we understand it, the Draft Report also explains that through a variety of actions, other than immediately prescribing permit limits based on the assumptions used for determining the WLAs, the State can “over the long-term” demonstrate that WLAs are being met.

We support this approach, as we have interpreted it, but urge EPA to explain clearly and consistently throughout the Draft Report that the State has considerable discretion in determining whether, when, and how Hg minimization measures and other measures intended to meet the WLAs should be implemented. In particular, the Draft Report should emphasize that the State has the discretion to prescribe Hg minimization and other control measures on Sanitary WWTPs and other point sources in a step wise fashion, after it has obtained and evaluated adequate data, including data on effluent Hg levels on a basin wide basis and data on site specific conditions, to determine if water quality standards have actually been exceeded and, if so, the optimal method for achieving such standards.

Moreover, the Draft Report should indicate clearly that it may be appropriate to defer prescribing permit limits or conditions to reduce effluent levels to meet the proposed WLAs until more accurate TMDLs and WLAs are established based on new and relevant site specific data. Indeed, the Draft Report appears to support this approach in certain places. For example, the report states that EPA recognizes that it may be appropriate to revise the TMDLs based on information gathered and analyses performed after July 2005. (p. 2-1). Further, the Draft Report states that EPA “is not requiring point source reductions at this time” because of the very small contribution of point sources to the basin TMDLs and the lack of testing by method 1631. (p. 7-3.) These extremely important points strongly support our position that the EPA should make clear that the State has wide discretion in its approaches to implementing the Hg TMDL and WLA program. Any suggestion that the State of Louisiana has no option but to require point sources that discharge over 100,000 gallons per day to implement Hg minimization programs if Hg is detected in the effluent above the 12 ng/l level, let alone in any detectable amount, is unsupportable, particularly given the lack of relevant data. Imposing such a rigid approach on the State in turn would result in many dischargers expending considerable time and resources to make, at most, de minimis reductions in Hg that would have negligible impact on the environment.

In summary, we believe that more relevant and site specific data need to be collected before any Hg minimization programs are mandated and that the State of Louisiana must have considerable flexibility and discretion in the implementation of the TMDLs contained in the Draft Report, based on several important considerations, including:

- The lack of data on effluent levels and site specific conditions and the lack of numeric water quality criteria relevant to the Draft Report, each of which would have considerable bearing on the level of Hg minimization that may be appropriate for specific point sources.
- The unnecessary economic hardship that could result if onerous Hg minimization measures or controls were prematurely prescribed before effluent data for most sources in a particular basin and information on site-specific conditions are developed.
- The arbitrary assumption of 12 ng/L mercury in discharges from municipal WWTPs with discharges greater than 100,000 gpd in determining WLAs, which is based on extremely limited data.
- The likely need to soon revise the TMDLs based on newly developed data.
- The de minimis impact of point sources of Hg on the total Hg wasteload for the six coastal waterbodies.

3. Miscellaneous Corrections

While the Draft Report is not intended to establish TMDLs for segment 061201 or for sources discharging into the Vermilion-Teche basin, it contains statements suggesting that the report in fact is establishing TMDLs and WLAs for such sources. To minimize potential confusion on this matter, we urge EPA to make appropriate corrections, including:

- P. 3-2 (Table 3.1): Either Lafayette should be eliminated from the table, or a clear explanation should be provided that the Table covers areas for which the Draft Report is not establishing TMDLs.
- P. 6-8 and Appendix C-2: Page 6-8 states that Appendix C-2 “lists only those facilities for which wasteloads are being established in these TMDLs.” Appendix C-2, however, lists point sources from the Vermilion-Teche River Basin and mercury loads calculated for each such source, apparently based on the same assumptions for calculating WLAs for point sources intended to be covered by the Draft Report. The Draft Report should make the necessary corrections to clarify that the sources discharging into the Vermilion-Teche basin in fact have not been assigned WLAs by that report. For purposes of clarity, we suggest that all the sources discharging into the Vermilion-Teche basin be eliminated from Appendix C-2.

Thank you for your consideration. Please call me if you have any questions.

Sincerely,

Terry J. Huval, P.E.
Director, Lafayette Utilities System
(337) 291-5804

Ms. Diane Smith

May 15, 2005

Page 5 of 5

cc: Joey Durel, Lafayette City-Parish President
 Dee Stanley, Lafayette City-Parish CAO
 Frank Ledoux, Engineering & Power Production Manager (LUS)
 Craig Gautreaux, Wastewater Operations Manager (LUS)
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LOUISIANA MID-CONTINENT OIL AND GAS ASSOCIATION

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May 17, 2005

Ms. Diane Smith
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

Re: Proposed Louisiana TMDLs for Mercury
(70 FR 19760)

Dear Ms. Smith:

The Louisiana Mid-Continent Oil and Gas Association appreciates the opportunity to submit the following comments on the proposed mercury Total Maximum Daily Load (TMDL) calculation for several Louisiana waterbodies (70 FR 19760, April 14, 2005). Mid-Continent is an industry trade association representing individuals and companies who together produce, transport, refine and market crude oil, natural gas, petroleum products and electricity in Louisiana. Several Mid-Continent members discharge into the water body segments covered by this TMDL proposal and could be affected by any discharge limitations resulting from the TMDLs.

Mid-Continent submitted written comments on the previous EPA notice (69 FR 71409). Mid-Continent requests these comments be added to the docket for this notice as appropriate. Specifically, Comments 1, 3, 4 and 7 should be included (section references must be changed to reflect the new report's numbering system).

Mid-Continent supports the report's conclusion that an adaptive management approach is appropriate for the TMDLs. The activities outlined on page ES-6 are reasonable and appropriate based on the current information available for these waterbodies.

Mid-Continent, however, opposes the proposed endpoint selection of 0.5 mg/kg for fish tissue concentration. The endpoint should be based on Louisiana's criteria for these waterbody segments based on actions taken by the state and not on a "potential" action the state might take based on a lower criteria.

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As correctly noted, Louisiana has issued a fish consumption advisory for king mackerel in the Gulf of Mexico based on a 1.0 mg/kg criteria. The state has not at this time however, issued advisories for fish species in these segments with tissue concentrations averaging greater than 0.5 mg/kg but less than 1 mg/kg. These species include blackfin tuna, cobia, and greater amberjack.

The TMDL determination by Louisiana rules is supposed to be water segment specific based on the criteria imposed by the state for that specific waterbody. Since no fish advisories have been issued for the Gulf of Mexico based on concentrations less than 1 mg/kg, then it is inappropriate for EPA to suggest a level lower than that level in this TMDL proposal. Mid-Continent recommends the load reduction goal in Section 7.2 be based on this higher threshold.

Once again, Mid-Continent appreciates the opportunity to submit these comments.

Very truly yours,

Richard T. Metcalf
Health, Safety and Environmental
Affairs Coordinator



LOUISIANA MID-CONTINENT OIL AND GAS ASSOCIATION

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January 7, 2005

Ms. Linda Adams
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1445 Ross Avenue
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Re: Proposed Louisiana TMDLs for Mercury
(69 FR 71409)

Dear Ms. Adams:

The Louisiana Mid-Continent Oil and Gas Association appreciates the opportunity to submit the following comments on the proposed mercury Total Maximum Daily Load (TMDL) calculation for several Louisiana waterbodies (69 FR 71409, December 9, 2004). Mid-Continent is an industry trade association representing individuals and companies who together produce, transport, refine and market crude oil, natural gas, petroleum products and electricity in Louisiana. Several Mid-Continent members discharge into the water body segments covered by this TMDL proposal and could be affected by any discharge limitations resulting from the TMDLs.

Mid-Continent understands that the Department of Environmental Quality requested a comment deadline extension and you have been sent similar requests by both Mid-Continent and the Louisiana Chemical Association. Should this extension be granted after submission of these comments, Mid-Continent reserves the right to supplement these comments.

Mid-Continent is concerned that the proposed 57% mercury loading reduction would effectively force a total elimination of mercury discharges from point sources in the segments listed other than the Mississippi River segment. This assumes that there is limited opportunity to practically reduce nonpoint source loadings. This is a totally unacceptable result since the great majority of the mercury loading is caused by out of state air emission problems that the state of Louisiana cannot influence. The following comments detail Mid-Continent's concern with the proposed TMDL methodology and results.

Comment 1 – Additional Reference Study

Mid-Continent requests that the attached study entitled “Fates and Effects of Mercury from Oil and Gas Exploration and Production Operations in the Marine Environment” by Dr. J. M. Neff of Battelle Memorial Institute be included in the docket. This study was prepared for the American Petroleum Institute (API) in July 2002 and was intended to summarize the relevant available information regarding mercury impacts from oil and gas operations in the Gulf of Mexico. Should this report include information that contradicts the EPA analysis, the EPA should reconcile such differences and re-propose the TMDLs as appropriate.

Comment 2 - Section 3.3 Endpoint Identification

Mid-Continent opposes the proposed selection of the endpoint selection of 0.5 mg/kg for fish tissue concentration. Mid-Continent understands the stated rationale that the endpoint should be based on fish consumption criteria based on the DEQ narrative water quality standard outlined in Section 3.2. Mid-Continent is still, however, researching the legal authority of this rationale. The endpoint should, however, be based on Louisiana’s criteria for this waterbody segment based on actions taken by the state and not on a “potential” action the state might take based on a lower criteria.

As correctly noted, Louisiana has issued a fish consumption advisory for king mackerel in the Gulf of Mexico based on a 1.0 mg/kg criteria. The state has not at this time however, issued advisories for fish species in these segments with tissue concentrations averaging greater than 0.5 mg/kg but less than 1 mg/kg. . These species include blackfin tuna, cobia, and greater amberjack.

The TMDL determination by Louisiana rules is supposed to be water segment specific based on the criteria imposed by the state for that specific waterbody. Since no fish advisories have been issued for the Gulf of Mexico based on concentrations less than 1 mg/kg, then it is inappropriate for EPA to suggest a level lower than that level in this TMDL proposal.

Mid-Continent recommends the TMDLs be re-evaluated based on this higher threshold.

Comment 3 - Subsection 5.5.4 – Mercury Meters

Mid-Continent supports the position that mercury from gas metering locations should not be included in the analysis. The referenced 25,000 – 30,000 metering stations are a historical estimated number based on gas wells drilled between 1950 and 1990 and do not represent the number of “active” locations with mercury meters. Starting in the late 1960s and early 1970s, industry began to transition to either dry flow or electronic meters. Additionally, it is estimated that 70% of these potential locations are in north Louisiana and are not part of this geographic study area. Additionally, any contamination would be very localized and unlikely to migrate to a waterbody segment. Industry estimates that there are approximately 1500 active sites with mercury meters with the great majority being located in north Louisiana.

Mid-Continent is actively participating in the DEQ's Mercury Initiative Industrial Processes Workgroup. This issue was discussed in a meeting on December 7, 2004. The results from this effort will further reduce the potential contribution of this source of mercury on these waterbodies.

Comment 4 - Subsection 5.5.4 – Drilling Fluids

Mid-Continent also supports the position that drilling mud discharges have minimal impacts. These discharges were halted in the coastal waters of Louisiana in the early 1990s. Mid-Continent also agrees that the mercury in barite is of a form (mercuric sulfide) which is very insoluble. More on this can be found in the aforementioned API study.

Comment 5 – Section 6.1 Current Load Evaluation

Mid-Continent supports Option 2 in this Section. An assumption that particulate mercury will stay suspended for over 100 miles in some of the segment areas is unrealistic. Many of these coastal bay areas are fed by streams that are slow moving and much of the particulate mercury will drop out long before reaching the Gulf of Mexico. Since many of these feeder streams are fresh water, king mackerel (and other food chain organisms for king mackerel) will not be present in these streams far from the coastline. While the 50% reduction figure is still arbitrary, and EPA gives no reasoning for selecting this figure, it is still more likely to be representative of actual conditions than the 100% figure.

Additionally, the bulk of the Mississippi River sediments are now deposited in waterdepths of over 400 feet. This is evidenced by the lack of wetlands growth in Louisiana due to the loss of sediments from the river. These sediments, due to the extreme water depth, are unlikely to contribute to the food chain to any great extent, and the 50% contribution level is thought to be excessive.

Since the Mississippi River mercury loading level is two thirds of the total load suggested, any over estimation of the mercury contribution of the river has a significant impact on the calculated load reduction necessary in Tables 6.4 and 6.5.

Comment 6 – Section 6.2 Load Reduction Goal

Mid-Continent disagrees with the methodology for determining the 57% load reduction goal. First, as stated in Comment 2, Mid-Continent disagrees with the selection of the 0.5 mg/kg tissue concentration factor.

Secondly, the assumption that there is a linear relationship between the mercury load and mercury concentration in fish tissue is overly simplistic. Mercury in king mackerel is a function of food intake and not necessarily mercury concentration in the waterbody. Figure 14 of the API study shows that mercury concentration is a function of fish length (which corresponds to age and weight of the fish). Since king mackerel have a life of approximately 20 years, the higher mercury

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concentration in larger fish may be caused by food chain consumption occurring a decade earlier and not necessarily the food consumption of today. EPA presents no evidence of a “direct” correlation between water quality and species that are “high” on the food chain.

Finally, Table 6.3 lists sample data from only six coastal bay areas, but EPA proposes to impose the load reduction goal to all nine coastal bay areas (Tables 6.4 and 6.5). EPA presents no data to substantiate why mercury reductions are needed in the Atchafalaya Bay and Delta, Lake Pontchartrain Basin and Sabine River Basin segments. There are no fish advisories for mercury for any species in the Lake Pontchartrain and Sabine areas. EPA, therefore, has no reason to impose reductions for these areas.

Comment 7 – Section 6.4 Marginal Safety

Mid-Continent concurs with EPA’s decision that an explicit margin of safety was not appropriate for inclusion in this analysis.

Once again, Mid-Continent appreciates the opportunity to submit these comments. If you have any questions or need further information, please call me at (225) 387-3205 or or email Metcalf@lmoga.com.

Sincerely,

Richard T. Metcalf
Health, Safety and Environmental
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Attachment

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VIA EMAIL

June 9, 2005

Diane Smith
Environmental Protection Specialist
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United States Environmental Protection Agency
Region 6
1445 Ross Avenue
Dallas, TX 75202-2733

RE: Louisiana Chemical Association
Comments on Proposed TMDL for
Mercury in Louisiana Coastal Waters
70 Fed. Reg. 19760, April 14, 2005
File No.: 3645-267

Dear Ms. Smith:

Our firm represents the Louisiana Chemical Association in connection with this matter. LCA submitted comments on EPA's originally proposed TMDL for mercury in Louisiana coastal waters ("Original TMDL"), which was published for comment in the December 4, 2004 Federal Register. A copy of those LCA comments is attached. In an April 14, 2005 Federal Register notice, EPA indicated that it was withdrawing the originally proposed TMDL and substituting a new one ("Revised TMDL") without responding to comments on the Original TMDL. See 70 Fed. Reg. 19760.

In the notice of the Revised TMDL, EPA did not inform the public what the changes were from the Original TMDL. Further, there was no preamble, no response to comments, no executive summary of the changes, and no black-lined or marked-up draft to show the changes made to the Original TMDL. This made review difficult. LCA requests that in the future, when EPA revises a TMDL, that EPA prepare a black-lined draft to show the exact changes made to

the original. This would be a helpful approach consistent with EPA policy to provide the public with transparency in its actions that require public review and comment.

The only significant change that LCA was able to discern in the limited time provided for comment was that EPA deleted three water segments from the TMDL and readjusted the total loading to account for removal of these three segments. These were: 031201 in the Calcasieu basin, 050901 in the Mermentau basin, and 061201 in the Vermillion-Teche basin. EPA indicated that these subsegments were deleted from the TMDL because EPA already established TMDLs for these three subsegments. LCA believes that EPA cannot simply dismiss the new proposal without response to comments to indicate why the new proposal was not based on better data and should not take precedence over the existing TMDL. It is well established that TMDLs can and should be changed based upon improved information. While LCA supports that a water segment cannot be regulated by two TMDLs simultaneously for the same pollutant, EPA should discuss in the response to comments here why the newer proposal reflected in the Original TMDL, presumably based upon better information and modeling of air deposition sources, was not used to revise the existing TMDLs for these subsegments. LCA does not believe that a TMDL is warranted for mercury for any of these waters, based on the fact that EPA has acknowledged that there have been no samples showing ambient water quality standards for mercury have been exceeded. However, if any TMDL is calculated, the endpoint for the TMDL should be the Louisiana water quality standard of 1.0 mg/kg of methylmercury in fish tissue rather than the 0.5 mg/kg arbitrarily chosen by EPA. At a minimum, EPA should provide an analysis of which of its TMDLs – the Original or the existing ones for these three subsegments are more appropriate so that the public can adequately comment on this decision.

It should be noted that fish tissue data and other data from these three subsegments still appears as part of the analysis and support for the Revised TMDL. LCA requests that EPA identify in a response to comments whether any data from these three subsegments was still relied upon by EPA to formulate TMDLs for waters outside of those three subsegments and whether such reliance is appropriate given that the three subsegments were removed from the TMDL.

LCA hereby incorporates its comments on the Original TMDL, attached hereto, as comments on the Revised TMDL. In particular, LCA believes that EPA does not have legal authority to establish the TMDL based upon an endpoint of 0.5 mg/Kg of mercury in fish tissue when this level is not a state water quality standard. EPA may only establish TMDLs where the water segment at issue is impaired due to a violation of an applicable state water quality standard. Louisiana has numeric criteria for mercury in marine waters which is 2 ppb as an acute criteria and 0.025 ppb as a trigger value for chronic criteria which requires fish tissue testing to determine whether the tissue exceeds the FDA action level of 1.0 mg/kg. This value was established to protect humans who eat such marine species, thus protecting the fishable uses of the state waters. The state criteria is not arbitrary or capricious and is based on the recognized safe level established by the Federal Food and Drug Administration. The legally established criteria is not 0.5 mg/Kg in fish tissue – the end point used by EPA in this Revised TMDL. EPA has no authority to establish a water quality standard for Louisiana and must change the end-point to be equivalent to the state standard. *See, e.g., Stinson v. United States*, 508 U.S. 36, 44-45, 113 S. Ct. 1913, 1918-1919 (1993).

LCA also has significant concern with the methodologies used by EPA to establish this TMDL, as discussed in the attached comments on the Original TMDL. The process used by EPA is fraught with

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errors and uncertainty and should not be used to establish this TMDL. EPA has rushed to judgment simply to satisfy the consent decree, when a more valid approach would counsel for requesting an amendment to the decree to obtain more time to address the TMDL development in a more scientifically valid manner.

Due to these uncertainties, LCA supports the EPA conclusion that it will not impose permit limits on point source discharges based upon the Revised TMDL at this time. LCA agrees with EPA's assessment that measures required under the Clean Air Act are likely to address any issue with mercury in king mackerel; and because these are nationwide measures, such are an appropriate means to address fish species that have ranges throughout the Gulf of Mexico.

LCA is appreciate of the ability to comment on this proposal and thanks EPA for this opportunity. LCA requests that EPA provide a response to these comments. If you have any questions concerning these comments, please contact Henry Graham, Jr. at 225.344-2609.

Very truly yours,

Maureen N. Harbourt

January 10, 2005

Ms. Linda Adams
Environmental Scientist
Water Quality Protection Division
United States Environmental Protection Agency
Region 6
1445 Ross Ave.
Dallas, TX 75202-2733

VIA EMAIL, FACSIMILE, AND FEDERAL EXPRESS

Re: Comments of the Louisiana Chemical Association regarding
Proposed Mercury TMDLs for Coastal Bays and Gulf Waters of Louisiana
Subsegments 10901, 021102, 031201, 042209, 050901, 061201, 070601,
110701, and 120806
69 Fed. Reg. 71409 (December 9, 2004)
Our file: 3645-267

Dear Ms. Adams:

The Louisiana Chemical Association ("LCA") appreciates the opportunity to comment on the above-referenced proposed mercury ("Hg") total maximum daily loads ("TMDLs") for coastal bays and gulf waters of Louisiana (Subsegments 10901, 021102, 031201, 042209, 050901, 061201, 070601, 110701, and 120806) (the "Proposed TMDLs"). LCA is a nonprofit Louisiana corporation, composed of 76 members located at over 105 plant sites in Louisiana. Each such plant site has wastewater discharges subject to the NPDES program, either directly or as delegated to the State of Louisiana. Further, several LCA members have facilities with discharges either within or potentially affecting the coastal bays and gulf waters of Louisiana.

LCA requests that these comments be placed into the administrative record for the Proposed TMDLs. LCA is submitting these comments protectively as the U.S. Environmental Protection Agency ("EPA") has not yet acted on LCA's request for an extension of the public comment period, filed on January 5, 2005. LCA reserves the right to supplement these comments should the comment period be extended. LCA believes that additional information that is critical to the establishment of the Proposed TMDLs can be developed and submitted within a short period of time should the comment period be extended, as requested by LCA.

LCA's initial comments on the Proposed TMDLs follow.

INITIAL LCA COMMENTS ON PROPOSED TMDLs

1. General--Incorporation of Other Comments.

LCA hereby adopts and incorporates by reference those comments on the Proposed TMDLs made by (a) members of LCA, (b) the Louisiana Mid-Continent Oil and Gas Association ("LMOGA"), (c) members of LMOGA, (d) members of the American Chemistry Council, and (e) the Louisiana Department of Environmental Quality ("LDEQ") to the extent such comments are not inconsistent with the comments made herein by LCA.

2. General--Inappropriate Use of Narrative Standard to Develop TMDLs.

a. **Use of Hg Levels in King Mackerel as Basis for TMDLs.** EPA is basing the need for TMDLs solely on the fact that king mackerel in the Gulf of Mexico--which range widely through the whole gulf, not just Louisiana--have an average concentration of Hg in their tissue in excess of the Food and Drug Administration ("FDA") action level. LCA submits that it may be inappropriate to base TMDLs solely on the exceedances of the FDA Hg action level in just one fish species, rather than considering an average of Hg levels in all potentially affected fish species. At a minimum, LCA submits that it is overly conservative to assume that a person would eat only one kind of fish.

b. **Louisiana's Hg Human Health Numeric Criterion.** In the Draft TMDL Report--Mercury TMDLs for Coastal Bays and Gulf Waters of Louisiana, Subsegments 10901, 021102, 031201, 042209, 050901, 061201, 070601, 110701, and 120806, November 2004 (hereinafter the "Draft TMDL Report"), EPA states that Louisiana has only an aquatic protection criteria--not a human health protection criteria--for mercury in marine waters.¹ EPA states, therefore, that it may use the state narrative criterion--"no toxics in toxic amounts"--² to develop Hg TMDLs for Louisiana waters. EPA has selected 0.5 mg/kg Hg in fish tissue as the appropriate value to support this narrative criteria.

While the Louisiana water quality criterion for Hg is technically listed in the "aquatic protection" column of the numerical criteria chart,³ it is, in fact, a human health criterion. This is evident by the fact that the standard is tied to the Food and Drug Administration's value for the

¹ See, Draft TMDL Report, Section 3.3, p. 3-2.

² See, Draft TMDL Report, Sections 3.2 and 3.3, pp. 3-1 to 3-3; and LAC 33:IX.1113.B.5.

³ See, Table 1 of LAC 33:IX.1113.

amount of Hg that may exist in the edible portions of fish tissues. As noted in the applicable Louisiana water quality standards:

If the four-day average concentration for total mercury exceeds . . . 0.025 ug/L in saltwater more than once in a three-year period, the edible portion of aquatic species of concern must be analyzed to determine whether the concentration of methyl mercury exceeds the FDA action level (1.0 mg/kg). If the FDA action level is exceeded the state must notify the appropriate EPA Regional Administrator, initiate a revision of its mercury criterion in its water quality standards so as to protect designated uses, and take other appropriate action such as issuance of a fish consumption advisory for the affected area.⁴

c. Inappropriate Use of Narrative Criterion When Numerical Criterion

Exits. EPA states that TMDLs are needed because the excessive levels of Hg in king mackerel violate the “**narrative**” water quality criteria (“WQC”) in LAC 33:IX.1113.B.5. However, as noted above, the Louisiana Water Quality standards actually do provide numerical criteria for Hg for the protection of human health, and therefore, EPA cannot use the narrative criteria to develop Hg TMDLs. LAC 33:IX.1113.B.5 states, in pertinent part:

The numerical criteria (LAC 33:IX.1113.C.6) specify allowable concentrations in water for several individual toxic substances to provide protection from the toxic effects of these substances. Requirements for the protection from the toxic effects of other toxic substances not included in the numerical criteria and required under the general criteria are described in LAC 33:IX.1121.

LAC 33:IX.113.C.6 provides a numerical criterion for Hg for marine waters for the protection of human health. Thus, EPA must use this Louisiana numerical criterion, not the general narrative criteria for Hg, when establishing any TMDLs for Louisiana coastal waters and bays.

However, as acknowledged by EPA in the Draft TMDL Report, “there have been no known violations of the numeric ambient water quality criterion for mercury”⁵ LCA thus submits that EPA’s development of Hg TMDLs based solely on the supposed violation of the state’s narrative “fishable” water quality standard is unjustified and should not proceed.

⁴ See, Footnote 11 to Table 1 of LAC 33:IX.1113.

⁵ Draft TMDL Report, Section 3.2, p. 3-1.

3. General--Inappropriate Use of 0.5 mg/kg for Acceptable Hg Fish Tissue Concentration.

LCA opposes EPA's proposed selection of a fish tissue concentration of mercury of 0.5 mg/kg as the endpoint, or water quality target, for establishing Hg TMDLs in Louisiana.⁶ While LCA agrees that the endpoint should be based on fish consumption criteria, the endpoint should be based on Louisiana's existing numerical criteria for Hg in marine waters. Thus, LCA submits that the trigger level for the concentration of mercury in fish tissue should be 1.0 mg/kg, as set forth in Footnote 11 of Table 1 of LAC 33:IX.1113, and not 0.5 mg/kg, simply because the Louisiana Department of Environmental Quality ("LDEQ") "**will consider** issuing a limited consumption advisory for children under the age of 7 and pregnant or breast feeding women when the edible fish tissue mercury concentration exceeds 0.5 mg/kg (LDEQ 2000)."⁷

As EPA correctly notes, Louisiana has issued a fish consumption advisory for king mackerel in the Gulf of Mexico based on the 1.0 mg/kg criteria.⁸ However, the state has not issued advisories for fish species with tissue concentrations of Hg averaging greater than 0.5 mg/kg but less than 1.0 mg/kg. These species include blackfin tuna, cobia, and greater amberjack.

A TMDL determination is water segment specific based on the criteria imposed by the state for that specific waterbody. Since no fish advisories have been issued for the Gulf of Mexico based on Hg concentrations in fish tissue of less than 1.0 mg/kg, it is inappropriate for EPA to establish an endpoint for the concentration of mercury in fish tissue lower than that level. Thus, LCA submits that EPA's establishment of Hg TMDLs based on an endpoint of 0.5 mg/kg of mercury in fish tissue is inappropriate. At a minimum, the TMDLs should be reevaluated based on the 1.0 mg/kg standard actually used by the State of Louisiana.

4. General--Establishment of TMDLs for Subsegments Not Impaired by Hg.

LCA submits that it is inappropriate for EPA to develop Hg TMDLs for any water body subsegment which has not been listed as having been impaired by Hg. In particular, LCA questions whether EPA's development of an Hg TMDL for the Vermilion-Teche River Basin (Subsegment 061201) is appropriate.

⁶ See, Section 3.3 of the Draft TMDL Report, pp. 3-2 to 3-3.

⁷ (Emphasis added.) Draft TMDL Report, Section 3.3, p. 3-2.

⁸ See, Draft TMDL Report, Section 1, p.1-1, and Appendix A.

LCA likewise submits that it is inappropriate for EPA to develop Hg TMDLs for Subsegments 110701 (Sabine River Basin) and 010901 (Atchafalya River Basin) where EPA has no data for such subsegments showing levels of Hg in fish tissue in excess of 0.5 mg/kg, much less the more appropriate endpoint of 1.0 mg/kg.⁹

5. **General--Assumption of Linear Relationship Between Hg Loadings and Hg in Fish Tissue.**

EPA correctly acknowledges that a “connection must be made between the mercury concentration in fish tissue and the point source and nonpoint source loads of mercury in the environment.”¹⁰ EPA then **assumes a linear relationship between mercury loadings and fish tissue concentration** because the Everglades Mercury Cycle Model (“E-MCM”) predicted a linear relationship between **atmospheric deposition** and fish tissue concentration.¹¹ EPA assumes, based on this model developed for the Everglades, that all reductions in point source and nonpoint source loadings will have a direct linear impact on reductions in fish tissue. This is an astounding leap. EPA does not address the validity of the E-MCM model, does not address how conditions in Louisiana coastal bays are similar to the conditions in the Everglades such that use of the conclusions of the Everglades study are valid for Louisiana coastal areas, and EPA does not address the uncertainty factors inherent in applying the conclusions of the E-MCM model to Louisiana without even attempting to use Louisiana inputs and to run the model here. EPA needs to provide the basis for this model and indicate whether it has been appropriately peer-reviewed and validated, particularly for use in the Louisiana TMDLs. LCA also questions whether the model has ever been used anywhere other than the Everglades?

LCA further notes that the fish in the Everglades study that demonstrated a linear relationship was large mouth bass, a fresh water fish that does not possess the same characteristics as a king mackerel. Mercury concentration in king mackerel have been demonstrated to be more of a function of food intake and than a function of the mercury concentration in the waterbody. The fish consumption advisories around the country for mercury in king mackerel demonstrate that the Hg concentration in the fish is a function of fish length (which corresponds to age and weight of the fish). Because king mackerel have a life of

⁹ Draft TMDL Report, Section 4.2, p. 4-1, and Table 4.2, p. 4-4.

¹⁰ Draft TMDL Report, Section 3.4, p. 3-3.

¹¹ *Id.*

approximately 20 years, the higher mercury concentration in larger fish may be caused by food chain consumption occurring a decade earlier and not necessarily the food consumption of today. EPA presents no evidence of a “direct” correlation between water quality and species that are “high” on the food chain.

LCA submits that further testing and analysis is required before any such assumption can be justified. Atmospheric deposition of air contaminants is not the same as the discharge of water-borne pollutants, which can have different effects on the receiving water bodies. Moreover, as EPA acknowledges, neither EPA nor anyone else has conducted any in-depth simulation of the fate and transport of mercury in the water column or sediment resuspension of the coastal bays and gulf waters of Louisiana.¹² Given this obvious lack of reliable information, LCA submits that EPA’s assumption of a linear relationship between mercury loadings and fish tissue concentration is unwarranted and should not serve as the basis for the establishment of Hg TMDLs in the affected Louisiana water bodies. (EPA even acknowledges problems with its assumption of such a linear relationship. *See*, Draft TMDL Report, Section 5.5.3, pp. 5-14 and 5-15.) At a minimum, EPA must provide a better explanation of the suitability of the E-MCM model as a basis for preparation of the Proposed TMDLs.

6. General--Assumption of Zero Hg Point Source Loadings in Mississippi River Basin.

EPA simply assumes that all Hg loading in the Mississippi River Basin are from nonpoint sources because “it was beyond the scope of these TMDLs to differentiate point sources from nonpoint sources of mercury for a geographic area covering almost two-thirds of the continental United States.”¹³ The net result is that EPA provides a zero waste load allocation for point source dischargers of Hg within the Mississippi River subsegment.¹⁴ It will be unreasonable--not to mention patently unfair--for EPA to impose permit limitations on point source dischargers of Hg based on a zero waste load allocation for the 070601 subsegment, simply because EPA found it difficult to determine the Hg loadings from point sources into the Mississippi River Basin. LCA thus assumes that EPA has no intention of imposing Hg permit limits on such point source dischargers based on the proposed TMDLs. If LCA’s assumption is incorrect, LCA submits that the TMDLs proposed by EPA for the Mississippi River Basin coastal bays and gulf

¹² *See*, Draft TMDL Report, Section 5.5.3, p 5-15.

¹³ Draft TMDL Report, Section 6.1, p. 6-1.

¹⁴ Draft TMDL Report, Section 6.5, Tables 6.6 and 6.7, p. 6-5.

waters of Louisiana (subsegment 070601) are inappropriate and must be revised to address point source discharges of Hg.

7. General--Establishment of TMDLs Premature.

According to EPA, air rules already promulgated will result in a greater than 70% reduction in Hg emissions with a corresponding reduction in fish tissue mercury concentrations.¹⁵ LCA submits that this 70% reduction in Hg air emissions, in and of itself, may be sufficient to adequately reduce the levels of Hg in fish tissue, especially if an appropriate endpoint of 1.0 mg/kg is used. Given this, LCA submits that additional study is warranted prior to the establishment of Hg TMDLs for the affected water bodies. EPA has stated publicly that when sufficient reductions can reasonably be predicted from air emission control rules, no TMDL is needed, and the waterbody may be delisted. See <http://www.cdphe.state.co.us/hm/mercury/workshop/presentations/cocca.pdf> at page 18 of 21. At a minimum, no permitted dischargers should be subjected to new or revised permit limitations until the effect of these reduced Hg air emissions has been appropriately analyzed.

8. General--Effect of Proposed TMDLs on Dischargers Outside of the Listed Subsegments.

In the Draft TMDL Report, EPA seems to indicate that dischargers outside of the listed subsegments may be affected by the Hg TMDLs if, for example, they are located in the same coastal basin as an affected subsegment. *See, e.g.*, EPA's statement in Section 7.2 of the Draft TMDL Report, page 7-3, that "LDEQ should develop a prioritization strategy for determining the need for additional permit requirements for facilities within each coastal basin." LCA submits that only dischargers within the listed subsegments as set forth in the title of the Draft TMDL Report¹⁶ should be affected by the proposed TMDLs, absent new notice to dischargers in upstream basin subsegments and an opportunity for them to comment on the proposed TMDLs.

9. General--Effect of Proposed TMDLs on Existing TMDLs.

In 2002, EPA developed final TMDLs for the Calcasieu, Mermentau, and Vermilion-Teche systems. It is not clear whether the currently proposed Hg TMDLs are intended to supersede or modify the previously issued TMDLs. In the Draft TMDL Report, EPA states: "Where the technical information supports consistency between these {previously issued}

¹⁵ Draft TMDL Report, Section 7.1, p. 7-2.

¹⁶ That is, Subsegments 10901, 021102, 031201, 042209, 050901, 061201, 070601, 110701, and 120806.

TMDLs and this proposal, EPA intends individual allocations to be consistent among all of the mercury TMDLs.”¹⁷ What does that mean? This is not explained. Again, if EPA intends for the present TMDLs proposed in this action to have any impact on upstream dischargers, EPA must send a new notice and allow opportunity for comment.

10. General--Unjust Burden on Louisiana for Regional/Global Problem.

If, as EPA states, Hg contributions come from local, regional, and global sources,¹⁸ why does Louisiana have to provide all of the Hg reductions necessary to achieve the targeted endpoint? It seems that in preparing the Proposed TMDLs, EPA has assumed that all of the Hg loadings and all of the Hg reductions affecting king mackerel in Louisiana coastal waters must come from Louisiana. Given the breath of sources for the Hg contamination, coupled with this species’ movement all over the Gulf of Mexico, an assumption that all of the Hg loadings and all of the Hg reductions affecting king mackerel in Louisiana coastal waters must come from Louisiana is completely arbitrary (and a bit of a “hit and miss” approach). If, for example, another state has significant contributions of Hg, then the percentage Hg reductions in Louisiana may not be sufficient to achieve the targeted endpoint. At a minimum, EPA must justify its focus on Louisiana for the resolution of a problem which is not solely of Louisiana’s making.

11. Section 2 of Draft TMDL Report--Study Area Description, pp. 2-1 through 2-11.

a. EPA “elected” to use a regional rather than waterbody-specific approach for developing the TMDLs. Why are the proposed TMDLs regional and not for the whole Gulf of Mexico if other states are contributing to the problem? EPA should treat dischargers and emitters of mercury the same in all states. LCA submits that EPA may have acted arbitrarily in developing Hg TMDLs solely for the Louisiana coast.

b. Did EPA investigate king mackerel migration/lifestyle patterns? LCA could not find this within the Draft TMDL Report. LCA submits that no Hg TMDLs should be proposed based solely on Hg levels in king mackerel without adequate consideration of such migration/life style patterns. Further, it is not clear that EPA collected sufficiently representative samples as there is no QA/QC or sampling/analysis plan. It is critical that EPA collect a wide range of king mackerel from commercial and recreational fishereies, of different sizes, from different seasons of the year, and from inshore and offshore areas to ensure that the king

¹⁷ Draft TMDL Report, “Additional Information for the TMDL Reviewers.”

¹⁸ Draft TMDL Report, Section 5.1, p. 5-1.
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mackerel data used herein is sufficiently representative to support these TMDLs. LCA requests that EPA provide this information.

c. EPA failed to describe the methodology by which it defined the study area. Without a further explanation and justification for the study area, LCA cannot determine whether the area selected is appropriate. Why not a larger area of Louisiana? Why not a smaller area?

d. EPA states that it made "the decision not to attempt to estimate background levels of Hg or model Hg cycling within the Gulf of Mexico." This appears completely arbitrary and affects the key assumptions supporting the TMDLs (i.e., that all point source loadings within the study area end up in the subsegments at issue and that either 50% or 100% of all nonpoint source loadings do so as well). As noted above, there is no attempt to simulate or otherwise do any in-depth analysis of Hg fate/transport in affected water bodies. LCA believes that EPA has done cycling and fate/transport studies for other mercury TMDLs. EPA's unsupported assumptions grossly overestimate the amount of bioavailable mercury (i.e., methyl mercury) available for uptake in king mackerel in the subsegments at issue.

e. EPA treats the Mississippi River as a nonpoint source contribution. Why doesn't EPA do the same with the Atchafalaya River, as portions of the flow from the Mississippi River are diverted to the Atchafalaya River? (This same reasoning would apply with respect to any other water body receiving diversion flow from the Mississippi River.)

12. Section 3 of Draft TMDL Report--Problem Identification and Endpoint Identification, pp. 3-1 through 3-3.

a. **Section 3.1 Problem Definition.** EPA states that king mackerel have excess Hg. However, there is no demonstrated king mackerel problem in some of the subsegments. As such, at a minimum in order to justify Hg TMDLs in such subsegments, EPA must provide more data about king mackerel living habits and patterns. Only by providing such information can EPA justify its assumption that king mackerel are influenced by all of these subsegments even if there is no demonstrated problem within a subsegment.

EPA did not describe its fish testing protocol, and LCA has no way of knowing whether the Hg levels found, as reflected in the Draft TMDL Report, were solely from the edible portions of tested fish, nor whether the samples collected are representative. This is critical, as only the Hg levels in the edible portions of the tested fish are relevant. To the extent the proposed TMDLs were based on Hg levels in the non-edible portions of the tested fish, such TMDLs are invalid.

b. **Section 3.2 LDEQ Surface Water Quality Standards.** EPA acknowledges that there have been “no known violations of the numeric ambient water quality criterion for mercury.” EPA erroneously states that even if this is so, there is a violation of the narrative standard due to the fish consumption advisory. However, as noted above, under LAC 33:IX.1113.B, the narrative standard does not apply when there is a more specific numeric standard.

c. **Section 3.3 Endpoint Identification.** EPA states that “an endpoint for mercury can be established as a water numeric criterion, a sediment concentration, or a fish tissue value.” This is not correct; the endpoint must match Louisiana’s approved WQC for mercury. In this case, Louisiana’s standard does use water numeric criterion coupled with fish tissue values, but the value stated in the Louisiana rule is 1.0 mg/kg of Hg in the edible portion of fish tissue. *See*, Comment 3 above.

EPA states that the narrative criteria is appropriate because Louisiana does not explicitly use a mercury WQC for human health; i.e., that the Louisiana WQC is for aquatic protection. As noted in Comments 2.b and c above, this makes no sense when the WQC ties into the FDA action level, which is specifically designed as a human health protection value.

EPA states that an endpoint of 0.5 mg/kg in fish tissue has been used in previous Hg TMDLs in Louisiana but cites only “(USEPA 2003),” not a Federal Register citation. In the references to the Draft TMDL Report, this citation is to the TMDL for Little River and Catahoula Lake. The fact that EPA erroneously used 0.5 mg/kg as an endpoint for Hg in fish tissue before does not make its currently proposed usage correct. LCA has no members on Little River and Catahoula Lake and did not have opportunity to comment with respect to this previously issued TMDL.

EPA states that essentially all Hg in fish is methylmercury, so EPA has made that assumption. LCA questions whether EPA has specific data on king mackerel; i.e., does EPA have specific scientific support for the proposition that all mercury in **king mackerel** is methylmercury?

13. Section 4 of Draft TMDL Report--Data Assessment, pp. 4-1 through 4-7.

a. **Section 4.2 Fish Tissue Data.** LCA notes that when looking at all fish tested, the average level of Hg in fish tissue is actually below 0.5 mg/kg. Given this, LCA questions whether EPA acted appropriately in basing the proposed Hg TMDLs on a single species--king mackerel--particularly where that species is highly mobile and ranges to other states.

b. **Section 4.3 Sediment Data.** It is not clear how EPA used the sediment data from “adjacent and contributing watersheds.” LCA requests that EPA explain how EPA used this data to develop the proposed Hg TMDLs.

c. **Section 4.4 Atmospheric Deposition Data.** LCA asks that EPA justify its use of weekly atmospheric deposition data. How did EPA average the data? Did EPA use a strict numerical average or did EPA appropriately provide statistical adjustments to the average to account for the fact that only one sample per week was taken?

LCA questions whether the use of data from only four air monitoring stations is enough to make a good estimate for the REMSAD model used in the Draft TMDL Report. Should data from air monitoring stations in Texas or Mississippi also have been included?

14. **Section 5 of Draft TMDL Report--Identification of Pollution Sources, pp. 5-1 through 5-11.**

a. **Section 5.1 Mercury Cycle.** LCA notes that methyl mercury, not mercury, is the problem. Thus, not all mercury loadings will transfer into a linear relationship with fish tissue levels. There is a relationship only where there is methylation. Again, a careful comparison of the exact conditions in the Everglades study to the conditions in each subsegment at issue in Louisiana would be necessary to support this conclusion. LCA submits that EPA also needs to direct more attention to whether there are means to control/reduce methylation, not simply reduce the loadings of mercury.

b. **Section 5.2 Methylmercury Formation and Destruction.** EPA states that high levels of dissolved oxygen promote methylation, citing one EPA study in 1995. However, EPA states without citation that high levels of dissolved organic carbon in surface waters and pore waters are a characteristic of wetlands **and** that with “wetlands comprising 34 percent of the land use in the adjacent coastal and contributing watersheds of the study area, methylation of mercury is likely occurring.” LCA submits that fish tissue levels in those adjacent and contributing watersheds would be a much better measure of whether methylation is actually occurring. Thus, LCA submits that EPA should investigate the fish tissue levels in adjacent coastal and contributing watersheds before drawing its afore-mentioned conclusion, especially if the dischargers in such areas will be affected by the proposed Hg TMDLs (e.g., through Hg permit limits or requirements).

c. **5.3 Sources of Mercury Contamination.** EPA acknowledges that a large percentage of total mercury in river systems is transported in particulate phase as surface bound inorganic mercury, particularly where suspended particle concentrations are elevated.

Thus, such total mercury should not be bioavailable. This provides additional support for the need for an appropriate fate/transport analysis of Hg discharges into the environment. EPA simply cannot assume all total mercury discharges will methylate. At a minimum, EPA should do a test or pilot study on use of the E-MCM model on one of the subsegments in question prior to finalizing the proposed Hg TMDLs.

d. Section 5.4 Point Sources – Wastewater Discharges. In determining the mercury loadings, EPA did not consider discharges authorized under NPDES/LPDES general permits such as the coastal oil & gas permits, stormwater permits, etc. Likewise, EPA did not consider potential discharges from the huge number of camps in the affected areas (that may not be authorized under any general permits). LCA submits that without consideration of the loadings from these dischargers, EPA has not adequately determined the true point source Hg loadings in the affected areas.

While EPA used two studies on municipal waste water treatment plants, clean techniques were only used for certain in one of those studies. LCA submits that EPA should use the 15 ng/L from the Arkansas study as it did use clean techniques. Can EPA provide any rationale why the results from the Arkansas study would be unsuitable for Louisiana?

What 6 states were involved in the Association of Metropolitan Sewerage Agencies study? Has EPA established that the conditions in these 6 states are same as in Louisiana? Why didn't EPA sample Louisiana municipal wastewater treatment plants in Louisiana in the study area to get more accurate estimates directly applicable in Louisiana? These inputs are a major component of the Draft TMDL Report and should be based on Louisiana data. As it stands, LCA submits that EPA is essentially guessing that the affected Louisiana facilities each meet an average of 12 ng/L of mercury in their wastewater discharges.

As noted in Table 5.1, Footnote 5, for some NPDES point sources, EPA used the daily maximum Hg permit limit times 365 to determine Hg loading. This is too high. EPA should apply a factor to determine the average, not the maximum, even if there is only a permit limit for a maximum. This was done for Westlake Petrochemicals (2 facilities), Basell USA, and Calcasieu Refining--all of which are within the Calcasieu River Basin. These 3 facilities account for about 5,000 g/yr in Hg loading, or about 15% of the total Hg loading for Calcasieu River Basin NPDES point source dischargers. Thus, this issue is not insignificant. It should be a simple matter to readjust the values provided in the table to reflect a realistic estimate based on average flows.

EPA used only point sources with NPDES Hg limits and municipal wastewater treatment plants to determine Hg point source loadings. LCA questions whether EPA should also have included other potential point source discharges of Hg (e.g., laboratories, nonmunicipal

sewerage treatment plants, dischargers subject to general permits, etc.). Would this have a significant impact on EPA's estimated point source Hg loadings?

e. **5.5 Nonpoint Sources of Mercury Contamination.**

i. **5.5.1 Mississippi River Loading.**

EPA assumes that the Hg concentration of the total suspended solids is in equilibrium with the river bottom sediments. LCA questions whether this is a valid assumption. What is EPA's justification for this?

LCA submits that any Hg data used by EPA to determine Mississippi River loading of Hg should have been gathered by clean techniques. Was this the case?

ii. **5.5.2 Air Emissions.**

Why did EPA use the REMSAD model rather than CAM-X?

Has REMSAD Version 7.0 (used by EPA) been validated? Were problems encountered with earlier versions of the model corrected in this Version 7?

EPA used a grid resolution of 4 km, which LCA understand is a much finer resolution than that for which model was designed. Is REMSAD Version 7.0 actually capable of getting this resolution? What was the basis for EPA's use of a grid resolution of 4 km? Why wasn't 20 km used? Has EPA previously applied the model in this fashion (i.e., using a 4 km resolution)?

EPA notes that the REMSAD model was "enhanced" for this TMDL. How was it enhanced and have those enhancements been subject to peer review?

Why did EPA use 1998 meteorological data instead of data corresponding to the 2001 TRI and TEDI data? That is, why wasn't 2001 meteorological data used?

EPA indicates that nearly all of the wet deposition of Hg in Louisiana is from background--which LCA understands to mean global sources and sources outside of Louisiana. According to EPA, "tagged" sources contributed a greater percentage of the dry deposition at some basins, but EPA does not discuss how this impacts any conclusions about the TMDLs or potential control measures. For example, the tagged sources in Calcasieu [Nelson Steam and PPG] account for only 3% of the dry deposition in the coastal area and 9% in the near coastal area, whereas boundary conditions account for 85% and 80% in those areas, respectively.

However, in Lake Maurepas, tagged sources account for 66% of the coastal deposition and 43% of the near coastal area dry deposition. Overall, it seems that the primary sources for wet and dry deposition are from global or out-of-state sources of Hg. Given this, do the tagged sources really justify the imposition of Hg TMDLs?

iii. **5.5.3 Watershed Mercury Loading.**

EPA states that it had too limited data to conduct detailed hydrodynamic modeling. LCA submits that EPA should obtain the required data and conduct the necessary modeling before imposing Hg TMDLs.

Why does EPA use options for calculating/estimating Hg nonpoint source loading which are not the same as those used by EPA to calculate/estimate Hg point source loading? Would Hg from point sources behave differently? If so, what is EPA's basis for drawing such conclusion?

LCA submits that Option 1 for estimating Hg nonpoint source loading does not comport with reality, because under this option, EPA assumes that 100% of the Hg from nonpoint sources reaches the coastal areas at issue and that no Hg is left behind. To the extent that there is any Hg in aquatic species or sediment in upstream areas, this assumption cannot be correct. Moreover, the fact that dredging is periodically required in these upstream areas is proof enough that sediment--and any Hg adhering to it--settles out upstream.

LCA also questions the scientific basis for Option 2, which assumes that 50% of the rainfall runoff load and 50% of the sediment load from **contributing** watersheds and 100% of the rainfall runoff and sediment load from **adjacent** watersheds reaches the coastal areas at issue. EPA does not discuss how the fact that a watershed is contributing or adjacent affects either of the loadings from rainfall runoff or sediment. EPA must better articulate the basis for the estimates provided via Options 1 and 2 and explain why contributing watersheds and adjacent watersheds should be treated differently from a scientific viewpoint.

iv. **5.5.4 Miscellaneous Mercury Sources.**

EPA did not include loadings of mercury from discharges from offshore platforms because the studies on sediments in these areas indicate the Hg is not methylating. Why wasn't this same rationale used to reduce the estimates of loadings from other sources where the sediment conditions are similar? Do any coastal permits have Hg monitoring requirements? Could a ratio be developed?

15. Section 6 of Draft TMDL Report--TMDL Calculations, pp. 6-1 through 6-6.

a. 6.2 Load Reduction Goal.

As noted above, LCA submits that in establishing any Hg TMDLs for the affected subsegments, EPA should use average concentrations of Hg in all affected fish species, not just king mackerel. *See*, Comment 2.a above.

As noted above, LCA submits that in establishing any Hg TMDLs for the affected subsegments, EPA should use an endpoint of 1.0 mg/kg of Hg in fish tissue, not 0.5 mg/kg. *See*, Comment 3 above.

b. 6.3 TMDL Determination.

LCA submits that as EPA appears to be establishing a single Hg TMDL for all of Louisiana's coastal bays and gulf waters, the Hg percentage of reduction ultimately deemed necessary should be obtainable from any one or more of the affected basins. That is, under the proposed TMDLs, the 57% Hg reduction should not be limited to a 57% reduction within each basin, as long as there is a 57% Hg reduction in all basins taken as a whole. This would allow LDEQ flexibility in establishing Hg point source limits; e.g., where the Hg discharges from a facility in Basin A are reduced 100%, the Hg discharges from a facility in Basin B may only need to be reduced 33%.

c. 6.4 Margin of Safety.

LCA supports EPA's position that there should be no explicit margin of safety ("MOS") for the proposed Hg TMDLs because the over-conservatism used in the development of such TMDLs provides an implicit MOS.

LCA submits that EPA should list as another factor of over-conservatism that the end point is only for one species of fish and it is highly unlikely that humans would consume just this one fish species.

d. 6.5 TMDL.

EPA indicates that trading within a subsegment will be allowed, which LCA supports. However, LCA submits that EPA should also allow trading between basins. *See*,

Comment 15.b above. As EPA notes, it is the total Hg loading into Louisiana coastal bays and gulf waters that matters, not the individual contribution of Hg loading in any one basin.

Does EPA intend to restrict trading of Hg loadings between point source and nonpoint source dischargers? This cannot be correct, and LCA requests that EPA clearly state that such trading will be allowed. As long as the mercury loadings to the affected waterbodies are reduced, EPA should not restrict the manner in which such reductions can occur.

LCA objects to EPA's proposed establishment of waste load allocations ("WLAs") and load allocations ("LAs"). This is not EPA's function. While EPA can establish Hg TMDLs, LDEQ, which has been delegated the authority to administer the NPDES program in Louisiana, is the agency with authority to establish WLAs and LAs in Louisiana. Neither the consent decree nor the 1999 court order authorized EPA to establish WLAs and LAs, and EPA simply should not attempt to usurp the state's authority in this fashion. If the state can achieve whatever percentage reduction of Hg loadings is ultimately required by the final TMDLs, it is no business of EPA how such reductions are achieved (i.e., through reductions of point source or nonpoint source discharges of Hg). Moreover, in proposing the WLAs and LAs, EPA appears to be requiring proportional reductions of Hg loadings within each basin based on the relative contributions of point sources and nonpoint sources. Such a proportional reduction is not required; what matters is the reduction of the total Hg loadings to the affected waterbodies, however achieved. (For example, if the required reductions can be achieved through the control of mercury air emissions, there is no need to limit point source discharges of Hg.) For all of these reasons, LCA strenuously objects to the proposed WLAs and LAs in Tables 6.6 and 6.7 of the Draft TMDL Report.¹⁹

e. 6.6 Seasonal Variation.

What is the support for EPA's statement that the hypoxia in the Gulf of Mexico is conducive to methylation? If this is actually the case, should EPA account for reductions in mercury methylation expected from efforts to reduce hypoxia in the Gulf of Mexico?

¹⁹ See, e.g., <http://www.e3ventures.com/mercury/PDF/coccaP1.pdf>, where at least one EPA representative acknowledges that waters can be delisted or taken off a TMDL list if reductions in atmospheric deposition will be sufficient to meet water quality standards without controls on point sources.

16. Section 7 of Draft TMDL Report--Ongoing and Future Pollutant Loading Reductions, pp. 7-1 through 7-5.

a. 7.1 Air and Waste.

According to EPA, Hg emissions are expected to be reduced by 20% in Louisiana because of the activities of coal-fired power plants under the Clear Skies Initiative. How much reduction will occur out of state? Given that boundary conditions [global and out-of-state] were the primary contributors of both wet and dry atmospheric deposition of Hg according to the REMSAD model report, LCA submits that EPA must account for expected out-of-state reductions in Hg emissions in preparing the Hg TMDLs.

As one of the prime contributors was the BFI Medical Incinerator near New Orleans, LCA submits that EPA should account for the projected impact of the medical waste incinerator rule on this source and other state medical waste incinerators. The anticipated in-state reduction of Hg emissions should be considered by EPA in preparing the Hg TMDLs.

Given an expected 70% reduction in nonpoint source air emissions of Hg, LCA again questions whether EPA is justified in adopting any Hg TMDLs. At a minimum, the expected 70% reduction of Hg air emissions should provide reasonable assurance of reduction in Hg loadings into affected waterbodies without the need for any point source reductions of Hg loadings.

b. 7.2 Municipal and Industrial Dischargers.

LCA submits that it is a state (LDEQ) function--not an EPA function--to (i) prioritize among basins, (ii) determine the appropriate allocations between basins, (iii) determine appropriate WLAs and LAs, and (iv) develop appropriate permit terms and limitations. EPA should thus delete all of Section 7.2 of the Draft TMDL Report, which is not needed in a TMDL.

c. 7.3 Pollution Prevention and 7.4 LDEQ Statewide Mercury Program.

While LCA does not disagree with the statements made by EPA in Sections 7.3 and 7.4 of the Draft TMDL Report, LCA submits that these sections are superfluous and not appropriate to a TMDL, as they are within the jurisdiction of the state.

Ms. Linda Adams
LCA Comments--69 Fed. Reg. 71409
January 10, 2005
Page 18

LCA welcomes further review and dialogue with EPA personnel in light of the significant impact the Proposed TMDLs may have on industry. Should you have any questions regarding the written comments of LCA, please do not hesitate to contact me at (225) 344-2609.

Thank you for all of your assistance and cooperation.

Very truly yours,

LOUISIANA CHEMICAL ASSOCIATION

Henry T. Graham, Jr.
Director of Legal and Environmental Affairs

LDEQ's Comments on EPA's Mercury TMDL for Coastal Subsegments of Louisiana
Federal Register Notice: Volume 70, Number 71, page 19760 (4/14/2005)

General Comments

- This TMDL was developed because there is an advisory for king mackerel in Louisiana's coastal waters. However, all of the Gulf Coast states have a similar advisory in place for king mackerel. King mackerel is a marine species that migrates from south Florida waters in winter to more northerly waters in spring and spawns in midsummer offshore. The king mackerel lives its entire life in the open waters of the Gulf of Mexico. Thus, it is unlikely that placing effluent limitations on potential or assumed wastewater discharge sources in Louisiana will result in any reduction in mercury concentrations in king mackerel. EPA in its own reports has often cited air emissions from coal-fired utilities as the primary current source of mercury in the environment in the United States.
- EPA defines the area affected by the king mackerel advisory as consisting of 1,657 square miles of estuaries and 394,880 acres of wetlands. In actuality, the area under advisory is the coastal Gulf Waters to the State 3-mile limit, this does not include inland estuaries and wetlands because the king mackerel is a pelagic fish. This should be clarified in the report. (Section 3.0, page 3-1)
- LDEQ has concerns about many of the assumptions made in the calculation of mercury loads in this TMDL.
 - It was assumed that a linear relationship exists between the mercury load to the coastal subsegments and the king mackerel tissue mercury concentrations. The relationship between mercury load to a waterbody and the accumulation of mercury in the fish tissue is not thoroughly understood. Indeed, studies of fish tissue concentrations of mercury in freshwater species do not indicate a linear relationship between water column or sediment concentrations and fish tissue concentrations. These relationships are likely even more complex in the marine environment. A TMDL based on this relationship is disputable. (Executive Summary and Section 6.5.3, page 6-13)
 - EPA assumes 100% of rainfall runoff of dissolved mercury is transported to 303-listed coastal subsegments. LDEQ disagrees with this assumption. This is an overly conservative assumption. (Section 6.5.3, page 6-14)
 - EPA assumes that 100% of mercury associated with soil erosion is transported to the coastal subsegments. LDEQ disagrees with this assumption. There is insufficient data to support this assumption. (Section 6.5.3, page 6-14)
 - EPA assumes that 100% of both dissolved and particulate mercury loads generated by contributing and adjacent watersheds reach the listed coastal subsegments and are available for uptake, bioaccumulation, and biomagnification. LDEQ disagrees with this assumption. This is an overly conservative assumption, and there is insufficient data to support this assumption. (Section 7.1, page 7-1)

Specific Corrections:

- Introduction (page 1-1): Correct the statement that states, “The Consent Decree, *later modified by LDEQ*, required the establishment of TMDLs to address the fish consumption advisory.” The Consent Decree to which this statement refers is between the U.S. EPA and the plaintiffs, and **it was not modified by LDEQ**.
- Section 2 (page 2-1): In the phrase “complex *atmosphere* chemistry” replace the word atmosphere with **atmospheric**.
- Section 2.2 (page 2-2): Method *1613* E should be Method **1631**. In statement that reads, “As targeted NPDES permits are reissued, dischargers will be required...” insert the word **some** in front of dischargers.
- Section 6.0 (page 6-1, 2nd paragraph): In the statement concerning sulfate-reducing bacteria, insert the word **requirements** after oxygen concentration so that it reads “...sulfate-reducing bacteria whose oxygen concentration **requirements** are low...”



American Sugar Cane League

Est. 1922

Making Life Sweeter. Naturally

Craig Caillier
President

Jessie Breaux
Vice-President

James H. Simon
General Manager

May 9, 2005

Ms. Diane Smith
Water Quality Protection Division
USEPA Region 6
1445 Rose Avenue
Dallas, Texas 75202-2733

**RE: TMDLs for Mercury in Fish Tissue for
Coastal Bays and Gulf Water of Louisiana
(Draft TMDL Report, April 2005)**

Dear Ms. Smith:

The American Sugar Cane League is a not-for-profit organization representing the collective interests of Louisiana Sugar Cane farmers, Louisiana cane raw sugar mills and sugar refiners. Over 98 percent of Louisiana's sugar cane farmers and all 17 of Louisiana's operating sugar mills are dues-paying members of the League. All of the sugar mills have NPDES permits, all but one of the mills discharge waters into the stream basin subsegments covered by the draft TMDL report, and approximately 95 percent of Louisiana's sugar cane crop is farmed on lands draining to the coastal streams.

The proposed TMDLs would, if promulgated, impose very expensive mercury monitoring, reporting and permitting requirements on our present and future sugar mill discharges, and possibly restrict or forbid agricultural land-use changes and the construction of the future plant expansion and by-product utilization projects that are necessary for survival of the cane sugar industry in this region. Furthermore, recent and severe economic problems in the Louisiana sugar cane industry have created a situation in which a requirement for added costly expenditures to comply with mercury TMDL requirements could be fatal to the Louisiana sugar cane industry. It is our position that the proposed TMDL is unlawful, unwise, and as likely to harm the mercury situation, as it is to improve it.

The subject report asserts that mercury TMDLs are being established in accordance with requirements of Section 303 of the Clean Water Act, which section calls for TMDLs where there is non-attainment of a properly established water quality standard. The report admits there is no evidence of any violation of the water quality standard for mercury in any of Louisiana's coastal waters, nor any indication that the mercury standard is in jeopardy of violation. However, the report attempts to justify imposing TMDLs for mercury in Louisiana coastal basins because king mackerels caught in the Gulf of Mexico near Louisiana have "elevated levels of mercury". Reportedly, a "fish consumption advisory" issued by some state agencies advises limited eating of the species for health reasons, but the arbitrarily established fish mercury content alert level (0.5 ppm) is not a water quality standard nor is it a legally enforceable standard of any kind. Such fish may and are being lawfully marketed and consumed

American Sugar Cane League Of The U.S.A., Inc.

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Ms. Smith
May 9, 2005
Page 2

without any restrictions or food label warnings. In the absence of any non-attainment of the water quality standard, there is no legal basis for imposing TMDLs for mercury.

While effort to reduce mercury in consumer food is commendable, in this case the effort is misguided. There is no data to show that mercury levels in king mackerels are actually "elevated", how long such situation has existed, and how widespread the alleged "elevated" mercury situation is along the U.S. Coast of the Gulf of

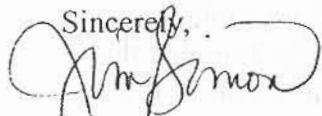
Mexico. There is no scientific basis on which to assert that any of the mackerel mercury content is due to discharges in any of the affected basin subsegments, and no scientific or common sense basis upon which to allocate total maximum daily mercury discharge loads there.

King mackerel is a pelagic (ocean dwelling) species that does not frequent Louisiana's less saline embayments. The fish sampling and analysis data cited in this report do indicate apparently "elevated" mercury content in king mackerel as well as other pelagic species tested. However, in three of the total eight fish sampling stations reported, fish species that do frequent the less saline embayments such as red drums, spotted seatrout and croaker were collected along with king mackerels, and all were found to be very low in mercury content. Drainage from coastal Louisiana watersheds appears not to be the cause of the mercury problem in pelagic fish species; rather, it appears that these basins in their present condition actually benefit the king mackerel by providing a better (much lower mercury content) fish food supply than available to the king mackerel elsewhere in the Gulf of Mexico.

The draft TMDL document's fish sampling data does, however, suggest a far more likely cause of the pelagic fish-mercury situation. The king mackerel sample with the very highest mercury content was collected near the mouth of the Mississippi River. It is well known that the highest mercury content in seawater is associated with turbidity (i.e. river silt). The annual "dead zone" reported in the Gulf associated with high Mississippi River inflow provides ample opportunity for mercury methylation in the very area where the reportedly "elevated" king mackerel samples were collected. EPA should have done something about the "dead zone" problems years ago instead of wasting resources on specious mercury TMDL issues in the coastal basins of Louisiana.

We urge that this attempt to impose unlawful mercury TMDLs be withdrawn forthwith.

Sincerely,



Jim Simon
General Manager

cc: LA Dept. of Environmental Quality, Office of Environmental Services
Bob Odom, LA Secretary of Agriculture
Hon. Charles Melancon, MC

LULA-WESTFIELD, L.L.C.

P. O. Box 10

Paincourtville, LA 70391-0010

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Chairman, Board of Mgrs.
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C. J. S. Daigle
Chris Mattingly

May 6, 2005

Ms. Diane Smith
Water Quality Protection Division
USEPA Region 6
1445 Rose Avenue
Dallas, Texas 75202-2733

**RE: TMDLs for Mercury in Fish Tissue for
Coastal Bays and Gulf Water of Louisiana
(Draft TMDL Report, April 2005)**

Dear Ms. Smith:

Lula-Westfield, L.L.C. is a privately held company that owns and operates two separate raw cane sugar factories located in Assumption Parish, both of which have NPDES permits controlling discharges to the Barataria basin of coastal Louisiana. The proposed TMDLs would, if promulgated, impose very expensive mercury monitoring, reporting and permitting requirements on our present and future discharges, and possibly restrict or forbid construction of the future plant expansion and by-product utilization projects that are necessary for survival of the cane sugar industry in this region. Furthermore, recent and severe economic problems in the Louisiana sugar cane industry have created a situation in which a requirement for added costly expenditures to comply with mercury TMDL requirements could be fatal to this company in particular, and to the Louisiana sugar cane industry in general. It is our position that the proposed TMDL is unlawful, unwise, and as likely to harm the mercury situation as it is to improve it.

The subject report asserts that mercury TMDLs are being established in accordance with requirements of Section 303 of the Clean Water Act, which section calls for TMDLs where there is non-attainment of a properly established water quality standard. The report admits there is no evidence of any violation of the water quality standard for mercury in any of Louisiana's coastal waters, nor any indication that the mercury standard is in jeopardy of violation. However, the report attempts to justify imposing TMDLs for mercury in the Barataria and other southern Louisiana basins because king mackerels caught in the Gulf of Mexico near Louisiana have "elevated levels of mercury". Reportedly, a "fish consumption advisory" issued by some state agencies advises limited eating of the species for health reasons, but the arbitrarily established fish mercury content alert level (0.5 ppm) is not a water quality standard nor is it a legally enforceable standard of any kind. Such fish may and are being lawfully marketed and consumed without any restrictions or food label warnings. In the absence of any non-attainment of the water quality standard, there is no legal basis for imposing TMDLs for mercury.

While effort to reduce mercury in consumer food is commendable, in this case the effort is misguided. There is no data to show that mercury levels in king mackerels are actually "elevated", how long such situation has existed, and how widespread the alleged "elevated"

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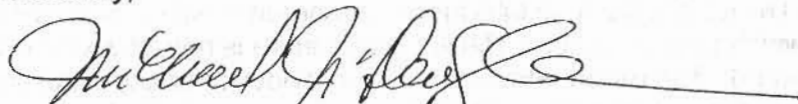
mercury situation is along the U.S. Coast of the Gulf of Mexico. There is no scientific basis on which to assert that any of the mackerel mercury content is due to discharges in the Barataria basin, and no scientific or common sense basis upon which to allocate total maximum daily mercury discharge loads there. Regulating mercury in the Barataria basin is no more likely to help the mackerel-mercury situation than it is to harm it.

King mackerel is a pelagic (ocean dwelling) species that does not frequent Louisiana's less saline embayments. The fish sampling and analysis data cited in this report do indicate apparently "elevated" mercury content in king mackerel as well as other pelagic species tested. However, in three of the total eight fish sampling stations reported, including the station near Barataria Bay, fish species that do frequent the less saline embayments such as red drums, spotted seatrout and croaker were collected along with king mackerels, and all were found to be very low in mercury content. Drainage from coastal Louisiana watersheds appears not to be the cause of the mercury problem in pelagic fish species; rather, it appears that these basins in their present condition actually benefit the king mackerel by providing a better (much lower mercury content) fish food supply than available to the king mackerel elsewhere in the Gulf of Mexico.

The draft TMDL document's fish sampling data does, however, suggest a far more likely cause of the pelagic fish-mercury situation. The king mackerel sample with the very highest mercury content was collected near the mouth of the Mississippi River. It is well known that the highest mercury content in seawater is associated with turbidity (i.e. river silt). The annual "dead zone" reported in the Gulf associated with high Mississippi River inflow provides ample opportunity for mercury methylation in the very area where the reportedly "elevated" king mackerel samples were collected. EPA should have done something about the "dead zone" problems years ago instead of wasting resources on specious mercury TMDL issues in the Barataria and other coastal basins of Louisiana.

We urge that this attempt to impose unlawful mercury TMDLs be withdrawn forthwith.

Sincerely,

A handwritten signature in dark ink, appearing to read "Michael J. Daigle", with a long horizontal line extending from the end of the signature.

Michael J. Daigle, President and CEO

Cc: LA Dept. of Environmental Quality, Office of Environmental Services
American Sugar Cane League
Bob Odom, LA Secretary of Agriculture
Hon. Charles Melancon, MC

IBERIA SUGAR COOPERATIVE, INC.

MANUFACTURERS OF
RAW SUGAR AND BLACK STRAP MOLASSES

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May 9, 2005

Ms. Diane Smith
Water Quality Protection Division
USEPA Region 6
1445 Rose Avenue
Dallas, Texas 75202-2733

RE: TMDLs for Mercury in Fish Tissue for
Coastal Bays and Gulf Water of Louisiana
(Draft TMDL Report, April 2005)

Dear Ms. Smith:

Iberia Sugar Cooperative, Inc. owns a raw cane sugar factory located in Iberia Parish, which has a NPDES permit controlling discharges to the Barataria basin of coastal Louisiana. The proposed TMDLs would, if promulgated, impose very expensive mercury monitoring, reporting and permitting requirements on our present and future discharges. Furthermore, recent and severe economic problems in the Louisiana sugar cane industry have created a situation in which a requirement for added costly expenditures to comply with mercury TMDL requirements would be fatal to this company in particular, and to the Louisiana sugar cane industry in general. It is our position that the proposed TMDL is unlawful, unwise, and as likely to harm the mercury situation as it is to improve it.

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While effort to reduce mercury in consumer food is commendable, in this case the effort is misguided. There is no data to show that mercury levels in king mackerels are actually "elevated", how long such situation has existed, and how widespread the alleged "elevated" mercury situation is along the U.S. Coast of the Gulf of Mexico. There is no scientific basis on which to assert that any of the mackerel mercury content is due to discharges in the Barataria

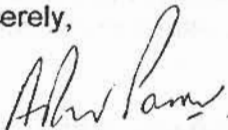
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We urge that this attempt to impose unlawful mercury TMDLs be withdrawn forthwith.

Sincerely,



Tony Parris, General Manager

Cc: LA Dept. of Environmental Quality, Office of Environmental Services
American Sugar Cane League
Bob Odum, LA Secretary of Agriculture
Hon. Charles Melancon, MC

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